

High Performance Torque Converters

<u>WARNING</u>: PLEASE READ ALL INSTRUCTIONS BEFORE PROCEEDING. RTS WILL NOT BE RESPONSIBLE FOR ANY DAMAGE AS A RESULT OF THE INCORRECT INSTALLATION OF THIS PRODUCT. IT IS RECOMMENDED THAT A QUALIFIED AUTOMOTIVE TECHNICIAN PERFORMS THIS INSTALLATION.

The instructions supplied are to help with successfully fitting your new torque converter, but we strongly suggest you have it professionally fitted by a qualified tradesman if you are unsure understanding anything.

Typical Installation

Note: Do not use anything sharp to remove plastic hub. You can easily damage the sealing surface of the pump hub and ruin the seal upon start up.

- 1. Before installing the torque converter into the transmission and re assembling your vehicle you must verify proper fitment of the torque converter to your flexplate and crankshaft. Verify that the flexplate bolts do not interfere with converter and that the converter mounting pads sit flush against the flexplate.
- **2.** Torque converters that feature threaded mounting bosses instead of bolt holes should have the threads cleaned of any residual paint.
- **3.** Verify crankshaft pilot is clean and free of paint, rust etc. Remove paint from converter pilot and apply grease or anti seize to converter boss prior to installation.
- **4.** It is highly recommended to take the opportunity to replace the front pump seal when installing a new converter. Extreme care needs to be exercised when replacing the lip seal as you can easily damage the front bushing with hand tools.
- **5.** Pre fill the converter with approximately 1 litre of transmission fluid before installing the converter. Use appropriate oil that suits your application.
- **6.** Apply some clean transmission fluid to the converter hub before installing converter into the transmission.

Torque converters that require a bolt and nut should have the bolt installed from the engine side of the flexplate and the nut installed from the converter side. Failure to do so may result in interference of the bolts with the rear of the engine.

Note: The torque converter must engage three separate stages, as such you will feel/hear three distinct clicks as the converter engages each transmission component. The converter must be fully seated in order to prevent damage to the front pump gear set, torque converter hub, flexplate or crankshaft thrust bearing.

NEVER install the torque converter onto the flexplate and then attempt to install the transmission. Failure to follow this step will result in transmission, torque converter and flexplate damage.





7. Install the transmission, taking care to not allow torque converter to slip forward and out of full engagement. Once you have the transmission installed you must verify the torque converter is pushed all the way back and observe 1/8" (.125") to 3/16" (.187") of air gap between the torque converter mounting pads and flexplate.

If you have between 1/8"-3/16" air gap then you may proceed with sliding converter forward and attaching it to flexplate.

If you have less than the required 1/8" air gap you may not have the torque converter fully seated into the front pump OR you have what is commonly known as tolerance stack up, in which case you will need to address.

If you have more than 3/16" air gap you may install high quality flat washers between the mounting pads and flexplate to shim the converter to the correct air gap dimension of 1/8"-3/16".

NEVER run the converter with less than the required torque converter free play. Running less than minimum torque converter clearance will result in damage to the front pump gear set, front pump stator body, torque converter pump hub or even crankshaft thrust bearing.

CAUTION: Exercise extreme care when shimming a torque converter to maintain enough pilot engagement into crankshaft. If the converter pilot does not have sufficient engagement in the crankshaft this may lead to a vibration and will eventually cause damage.

8. We recommend installing new torque converter bolts with a small amount of thread locking compound applied to the threads. Be sure to torque all fasteners to the proper specifications. Follow bolt manufacturers recommendations for correct torque specifications and procedures.

Thank you for your purchase of an RTS High Stall Torque Converter. We appreciate your support of our products

